



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,151	06/08/2006	Alexander Soltsev	WUE-59	8838
7590 07/09/2010				
Thomas J. Burger Woods Herron & Evans 2700 Carew Tower 441 Vine Street Cincinnati, OH 45202-2917				
EXAMINER				
CIRIC, LJILJANA V				
ART UNIT		PAPER NUMBER		
3744				
MAIL DATE		DELIVERY MODE		
07/09/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/582,151

**Applicant(s)**

SOLNTSEV ET AL.

**Examiner**

Ljiljana (Lil) V. Ciric

**Art Unit**

3744

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 April 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 12 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13 and 15-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 June 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB06)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 06/08/2006

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of the first species (readable on claims 1 through 11, 13, and 15 through 17) in the reply filed on April 20, 2010 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. Claims 12 and 14 are hereby withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to the various nonelected species, there being no allowable generic or linking claim.

Election was made **without** traverse in the reply filed on April 20, 2010.

### ***Priority***

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Drawings***

4. The drawings were received on June 8, 2006. These drawings are hereby objected to for the reasons set forth in greater detail below.

5. The drawings filed on June 8, 2006 are objected to because the line quality of the reference characters is generally poor and because the hand-written reference characters are not readily readable (i.e., the ones look like sevens, "P"? , etc.) Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency.

Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following features must be shown or the feature(s) canceled from the claim(s): the shutter as recited in claim 10. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Specification***

7. The abstract of the disclosure is objected to because it is generally written in a run-on fashion and because it contains idiomatic informalities and/or unclear terminology (i.e., "in order to supply cooling air

from the aircraft *surrounds to* at least two devices requiring cooling air"; "in such a way that *it* covers").  
Correction is required. See MPEP § 608.01(b).

#### ***Claim Objections***

8. Claims 1 through 11, 13, and 15 through 17 are objected to because of the following informalities: "Cooling air supply system" [claim 1, line 1] should be replaced with "A cooling air supply system"; "Cooling air supply system" [claim 2, line 1; claim 3, line 1; claim 4, line 1; claim 5, line 1; claim 6, line 1; claim 7, line 1; claim 8, line 1; claim 9, line 1; claim 10, line 1; claim 11, line 1; claim 13, line 1; claim 15, line 1; claim 16, line 1]; the acronym "NACA" [claim 2, line 2] should be removed/replaced with appropriate terminology written out in full; and, "Aircraft" [claim 17, line 1] should be replaced with "An aircraft". Appropriate correction is required.

9. Claim 17 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. As written, claim 17 appears to be dependent from claim 1, but fails to further limit or narrow the scope of claim 1.

#### ***Claim Rejections - 35 USC § 112***

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 1 through 11, 13, and 15 through 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, written in a run-on fashion, and thus failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and contain at least some grammatical and idiomatic errors.

For example, the limitation “for the supply of cooling air *from the aircraft surrounds* to at least two devices requiring cooling air (38, 44, 56) within the aircraft” [claim 1, lines 1-2] is not clear as written.

Also with regard to claim 1 as written, it is not clear whether the limitation “at least two devices requiring cooling air” as recited in lines 4-5 of the claim are or are not intended to refer back to the previously recited limitation “at least two devices requiring cooling air” appearing in line 2 of the claim.

Also, the limitations “whereby the air inlet (12) *is proportioned in such a way, that it covers the maximum cooling air requirement of at least two devices requiring cooling air*” [claim 1, lines 5-6] are not clear at all as written. First of all, it is not clear to which previously recited element the indefinite pronoun “it” [claim 1, line 5] refers, thus rendering indefinite the metes and bounds of protection sought by base claim 1 and all claims depending therefrom. Second of all, again, it is not clear if the limitation “at least two devices requiring cooling air” is or is not intended to refer back to either the previously cited limitation “at least two devices requiring cooling air” appearing in line 2 or to the previously cited limitation “at least two devices requiring cooling air” appearing in lines 4-5 of the claim. Last but not least, not only is there no proper antecedent basis in the claims for the limitation “the maximum cooling air requirement” appearing in lines 5-6 of the claim, but it is also not clear what is encompassed by “proportioned in such a way”, thus further rendering indefinite the metes and bounds of protection sought by the claim and all claims depending therefrom.

It is not clear what is encompassed/excluded by the limitation “an NACA air inlet” [claim 2, line 2].

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031,

2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, at least each of claims 4, 8, 10, and 15 recites a broad recitation followed by a narrow limitation: "there is at least one air compressor (26), preferably a ventilator" [claim 4, line 2]; "a cooling air collection chamber (28) joins onto the diffuser (16), preferably following the parallel arrangement of the first and second bypass line (20, 18)" [claim 8, lines 2-3]; "is provided with a throttle device (36, 39, 54), preferably with a shutter" [claim 10, lines 2-3]; and, "the device requiring cooling air, in particular the onboard oxygen generation system (OBOGS) and/or the on board inert gas generation system (OBIGGS)" [claim 15, lines 2-3].

The alternative language in claim 5 is not clear as written.

***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply

when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

13. As best can be understood in view of the indefiniteness of the claims, claims 1, 3 through 11, 13, and 15 through 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Brutscher et al. (2003/177780 A1; filed July January 15, 2004; made of record via IDS).

Brutscher et al. discloses a cooling air supply system for an aircraft and an aircraft essentially as claimed, including, for example: plural devices in the cabin requiring cooling air; an air inlet, and, an air distribution device.

The reference thus reads on the claims.

14. Alternately for claims 1, 11, 13, 15, and 17, and as best can be understood in view of the indefiniteness of the claims, claims 1, 11, 13, 15, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Munoz et al. (made of record via IDS).

Munoz et al. discloses a cooling air supply system for an aircraft and an aircraft essentially as claimed, including, for example: plural devices in the cabin requiring cooling air; an air inlet, and, an air distribution device.

The reference thus reads on the claims.

#### ***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



16. As best can be understood in view of the indefiniteness of the claims, claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Brutscher et al. or Munoz et al. (see above) in view of Scherer et al. (made of record via IDS).

Each of Brutscher et al. and Munoz et al. discloses a cooling air supply system for an aircraft essentially as claimed, as noted in greater detail above. Neither, however, specifically discloses that the air inlet is a NACA air inlet as recited in claim 2 of the instant invention. However, it is well-known in the art and taught by Scherer et al. that NACA air inlets are used on the outer skin of an aircraft to allow ambient air to be supplied into the aircraft. Thus, it would have been obvious to one skilled in the art at the time of invention to modify the cooling air supply system of either Brutscher et al. or Munoz et al. in order to specifically have the ambient air inlet be a NACA air inlet as taught by Scherer et al. in order to facilitate manufacture thereof, for example.

#### ***Conclusion***

17. The additional prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ljiljana (Lil) V. Ciric whose telephone number is 571-272-4909. The examiner works a flexible schedule, but can normally be reached weekdays between 10:30 a.m. and 6:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl J. Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 3744

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ljiljana (Lil) V. Ciric/

Primary Examiner, Art Unit 3744